

New Distributional Data about Some Leafbeetles in the Korean Peninsula and Descriptions of Four New Species (Coleoptera, Chrysomelidae)

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Abstract Some collection data of leafbeetles from North Korea are given. Among them five species [*Chrysomela cuprea* Fabricius, *Chrysomela lapponica* Linnaeus, *Phratora polaris* (Schneider), *Longitarsus brunneus* (Duftschmidt), and *Longitarsus nitidus* Jacoby] are reported for the first time from Korea and four species [*Chrysomela cyaneoviridis* sp. n., *Phratora ryanggangensis* sp. n., *Aphthona merkli* sp. n., and *Luperomorpha josifovi* sp. n.] are described as new sciences.

Key words Systematics, Coleoptera, Chrysomelidae, new species, Korea.

INTRODUCTION

This paper is based on the specimens, preserved in the Hungarian Natural History Museum-Budapest* and on some others, collected by Dr. M. Josifov and preserved in the author's collection. It contains data about 68 species, four of which are newly described to science and five are newly recorded to the fauna of the Korean Peninsula.

I thank to Dr. Otto Merkl of the Hungarian Natural History Museum for the loan of the material and Prof. Dr. Michail Josifov of the Institute of Zoology (Bulg. Acad. Sci.), Sofia, for the specimens collected by him in North Korea. My thanks also go to Dr. Seung Lak An for other valuable assistance. Marks(*) indicate the species which are reported new to the Korean Peninsula.

Abbreviations:

- AV - leg. A. Vojnits
- B - ex coll. Hungarian natural History Museum-Budapest
- FR - leg. Forró et Ronkay
- G - author's collection
- GS - leg. Gy. Szél
- LR - leg. L. Ronkay
- LZ - leg. L. Zombori
- MJ - leg. M. Josifov
- OM - leg. O. Merkl

*Zoological collectings by the Hungarian Natural History Museum in Korea, No. XXX (103)

LIST OF SPECIES

Family Chrysomelidae
Subfamily Lamprosomatinae***Oomorphoides cupreatus* (Baly, 1873)**

Locality. North Pyongan Prov., Myonhyang-san, 2. VII. 1990, MJ(G).

Subfamily Eumolpinae

***Abiromorphus anceyi* Pic, 1924**

Locality. Pyongyang City, Mt. Daesong-san, singled, 9. VII. 1982, FR(B).

***Aoria rufotestacea* Fairmaire, 1889**

Locality. Kangwon Prov., Kumgang-san, 28. V. 1985, AV, LZ(B).

***Basilepta fulvipes* (Motschulsky, 1860)**

Locality. Kangwon Prov., Kumgang-san, Onjong-ri, 400m, 22. VI. 1988, OM, GS(B); Pyongyang City, Michon-ho, 3. VII. 1988, OM, GS(B); North Pyongan Prov., Myonhyang-san, 2. VII. 1990, MJ(G); Kuail, 16. VII. 1990, MJ(G); Myonhyang-san, Manpoktong and Hotel Myonhyang-san, VII. 1982, FR(B); Pyongyang City, Mt. Daesong-san, Lake Bongchon-ho, singled, 9. VII. 1982, FR(B); Kaesong City, Kaesong, Hotel Janamsan, Netted, 29. VII. 1982, FR(B); Kaesong City, Bagyon Falls, singled, 30. VII. 1982, FR(B).

***Bromius obscurus* (Linnaeus, 1758)**

Locality. Ryanggang Prov., 31km on Paekdusan road, NW from Samjiyon, 2000m, 28. VI. 1988 and Mupo, Tuman-gang, 1000m, 29. VI. 1988, OM, GS(B); North Pyongan Prov., Mt. Pyonhyang-san, singled, 17. VII. 1982, FR(B).

***Colasposoma dauricum* Mannerheim, 1849**

Locality. Pyongyang City, Mt. Ryongak-san, singled, 20. VII. 1982, FR(B).

***Pagria signata* (Motschulsky, 1858)**

Locality. Kangwon Prov., Kumgang-san(Samil-po, 18. VI. 1988; Onjong-ri, 400m, 21. VI. 1988), OM, GS(B); Pyongyang City, Ryongak-san, 15. VI. 1988, OM, GS(B) and 31. V. 1985, AV, LZ(B); Daesong-san, 15. V. 1985, AV, LZ(B); Pyongyang, 30. V. 1985, AV, LZ(B).

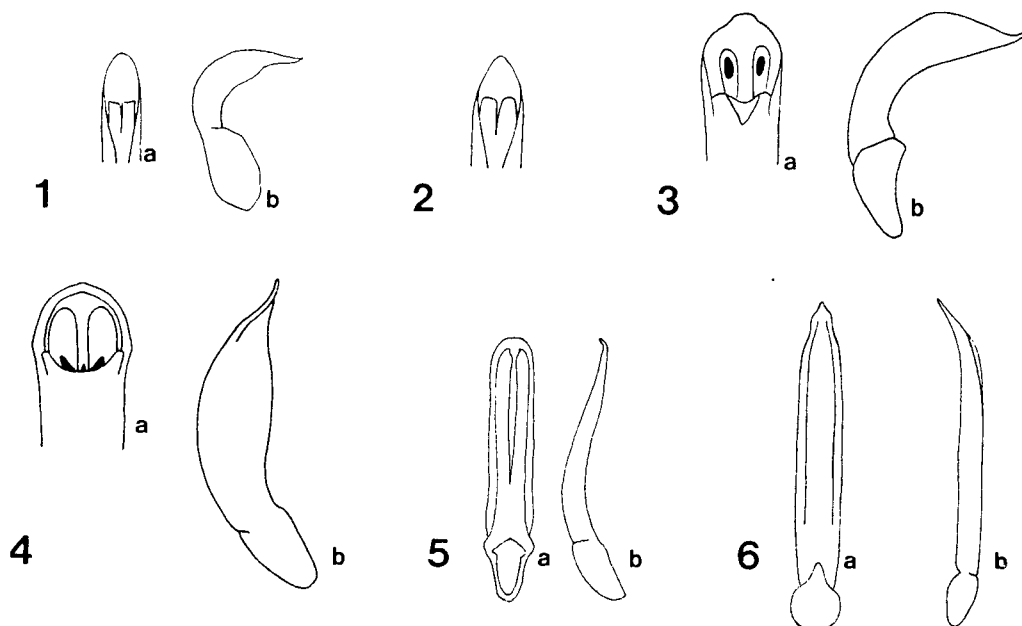
***Scelodonta lewisii* Baly, 1874**

Locality. Kangwon Prov., Kumgang-san, Onjong-ri, 400m, 21. VI. 1988, OM, GS(B).

Subfamily Chrysomelinae

***Chrysolina aurichalcea* (Mannerheim, 1825)**

Locality. South Hwanghae Prov., Haeju, Suyong-san, 16. X. 1987, ZK, LR(B); Kangwon Prov., (Kumgang-san, 23. X. 1987, SK, LR, Onjong-ri, 400m, 21 and 22. VI. 1988, OM, GS, Manmul-san, 21. VI. 1988, OM, GS)(B).



Figs. 1-6. Aedeagus: 1, *Chrysomela cyaneoviridis* sp. n. (a, apex (dorsal view); b, lateral view); 2, *Chrysomela cuprea* F. (apex-dorsal view); 3, *Phratora ryanggangensis* sp. n. (a, apex (dorsal view); b, lateral view); 4, *Phratora vitellinae* L. (a, apex (dorsal view); b, lateral view); 5, *Aphthona merkli* sp. n. (a, ventral view; b, lateral view); 6, *Luperomorpha josifovi* sp. n. (a, ventral view; b, lateral view).

***Chrysolina exanthematica* (Wiedemann, 1821)**

Locality. Pyongyang City, Mt. Ryongak-san, singled, 12. VII. 1982, FR(B).

***Chrysomela cyaneoviridis* sp. n. (Fig. 1)**

Locus typicus. Ryanggang Prov., Samjiyon, 1000m, 26. VI. 1988, OM, GS: holotype-male (No. 1345, B); Ryanggang Prov., Kanchang, 800m, 30. VI. 1988, OM, GS: paratype-female (No. 1368, B); Ryanggang Prov., Chong-bong, 900m, 30. VI. 1988, OM, GS: paratype-female (No. 1365, G).

Diagnosis. Differs from *Ch. cuprea* Fabricius in having colour different, pronotum without clear median groove and lateral callus not too densely punctured, and aedeagus differently shaped (apex of aedeagus of *Ch. cuprea* triangularly narrowed-Fig. 2).

Description. Oblong, slightly broadened behind middle, moderately convex, shining. Head, pronotum and elytron bluish-green, metallic; basal 6 segments of antenna partly red; underside of body and legs black with metallic lustre; last abdominal sternite very narrowly yellow-red margined apically. Head with deep and dense punctures, finely shagreened; frons with a deep and large depression. Antenna with 5 last segments thickened. Pronotum about $11/3$ times as broad as long, narrowed anteriorly, with sides nearly straight; lateral callus raised, with 20-30 deep and large punctures; lateral depression closer to lateral margin than to median line of disc; disc with very small but clear punctures. Elytron densely and deeply, confusedly punctured; lateral costa smooth, impunctate; apical part with a deep transversal depression.

Male. First segment of anterior tarsi moderately broadened, narrower than third segment. Aedeagus (Fig. 1) with apex broadly rounded; in profil strongly curved.

Length. 6.65-7.50 mm

***Chrysomela cuprea Fabricius, 1775 (Fig. 2)**

Ch. cuprea Fabricius, 1775, Syst. Ent., P. 96.

Locality. Ryanggang Prov., Mupo, Tuman-gang, 1000m, 29. VI. 1988, OM, GS(B).

Distribution. Europe, Siberia, Russian Far East. Pakistan. New to the Korean Peninsula.

***Chrysomela lapponica Linnaeus, 1758**

Ch. lapponica Linnaeus, 1758, Syst. Nat., ed. 10: 371.

Locality. Ryanggang Prov., Paekdu-san-milyong, 1500m, 27. VI. 1988, OM, GS(B).

Distribution. Europe, Siberia, North China, Japan, New to the Korean Peninsula.

Chrysomela populi Linnaeus, 1758

Locality. North Pyongan Prov., Myonhyang-san, 20 and 21. V. 1985, AV, LZ(B); Ryanggang Prov.: Samjiyon, 1000m, 26. VI. 1988 and Mupo, Tuman-gang, 1000m, 29. VI. 1988, OM, GS(B).

Chrysomela tremulae Fabricius, 1787

Locality. Ryanggang Prov., Samjiyon, 1000m, 26. VI. 1988, OM, GS(B).

Gastrolina depressa Baly, 1859

Locality. North Pyongan Prov., Myonhyang-san, 2. VII. 1990, MJ(G).

Gonioctena cheni (Bechyné, 1947)

Locality. North Pyongan Prov., Myonhyang-san, V. 1985, AV, LZ(B); Ryanggang-san: Samjiyon, 1000m, 4 and 5. VI. 1985, AV, LZ and Paekdu-san, 1500m, 27. VI. 1988, OM, GS(B).

Gonioctena coreana (Bechyné, 1947)

Locality. Kengi Prov.: Bagyon-san, near San-chon ri at San-chon tong, 22km SE from Kaesong, 7. VI. 1970(B).

Gonioctena fulva (Motschulsky, 1860)

Locality. North Pyongan Prov., Myonhyang-san, 2. VII. 1990, MJ(G).

Gonioctena laeta L. Medvedev, 1973

Locality. Ryanggang Prov., Samjiyon, 1000m, 26. VI. 1988, OM, GS(B).

Gonioctena suwai Takizawa, 1985

Locality. Ryanggang Prov., Paekdu-san-milyong, 1500m, 27. VI. 1988, OM, GS(B).

Phaedon brassicae Baly, 1874

Locality. North Pyongan Prov., Myonhyang-san, 23. V. 1985, AV, LZ(B).

Phratora laticollis (Suffrian, 1851)

Locality. North Pyongan Prov., Mt. Myonhyang-san, Hotel Myonhyang-san, at light, 13. VII. 1982, FR(B).

***Phratora polaris (Schneider, 1889)**

Phyllodecta polaris Schneider, 1889, Aarsh. Troms Mus., 9: 66.

Locality. Ryanggang Prov., Paekdu-san - milyong, 1500m, 27. VI. 1988, OM, GS(B).

Distribution. North Europe, Siberia, Mongolia. New to the Korean Peninsula.

***Phratora ryanggangensis* sp. n. (Fig. 3)**

Locus typicus. Ryanggang Prov., Chong-bong, 900m, 30. VI. 1988, OM, GS: holotype - male (No. 1365, B), 2 paratypes - females(B), 2 paratypes - females(G); Ryanggang Prov., Mupo, Tuman-gang, 1000m, 29. VI. 1988, OM, GS: 2 paratypes - females (No 1363, B).

Diagnosis. Differs from *Ph. vitellinae* Linnaeus (Fig. 4) in having usually discal punctate-striae more irregular, and aedeagus differently shaped.

Description. Body moderately oblong, slightly less than 2 times as long as broad, convex, with parallel anterior 2/3 of elytral sides. Head, pronotum and elytron greenish blue, metallic; underside and legs black with metallic lustre; antenna black; basal two segments of antenna red ventrally. Head finely punctured, shining; clypeus strongly depressed, triangular; frons not clearly depressed. Antenna slightly less than 1/2 body length, with apical 5 segments widened; segment 6th shortest, segments 4th and 5th slightly longer than 6th, equal in length, segment 2d not very clearly longer than 5th, segment 1st two times longer than 6th, segment 11th longest. Pronotum narrower than elytrae, widest at base, 1 4/5 as wide as long, slightly narrowed anteriorly, unmarginated basally; disc smooth and shining, finely punctured. Elytron with irregular rows of strong punctures on disc and with confuse and dense punctures laterally; interstices plane, smooth and shining, with small but clear punctures.

Male. First segment of anterior tarsi bradened, almost 4/5 as wide as third. Aedeagus strongly curved in profile, without pronounced convexities ventrally (Fig. 3).

Length. 3.75-4.20 mm

***Plagioderia versicolora* (Laicharting, 1781)**

Locality. Pyongyang City, Mangyongdae, 17. X. 1987, ZK, LR(B); Kangwon Prov., Wonsan, 17. VI. 1988, OM, GS(B); South Pyongan Prov., Lokam reserve, AV, LZ(B).

Subfamily Alticinae***Altica ampelophaga koreana* (Ogloblin, 1925)**

Locality. Ryanggang Prov.: Samjiyon, 1000m, 3. VI. 1985, AV, LZ, 26. VI. 1988, OM, GS, Kon-chang, 800m, 30. VI. 1988, OM, GS, Taehongdan, 1000m, 29. VI. 1988, OM, GS and Paekdu-san-milyong, 1500m, 27. VI. 1988, OM, GS(B).

***Altica caerulescens* (Baly, 1874)**

Locality. Pyongyang City: Mangyongdae, 17. X. 1987, ZK, LR and Ryongak-san, 15. VI. 1988, OM, GS(B); Kangwon Prov.: Kumgang-san, Onjong-ri, 400m, 21. VI. 1988, OM, GS and Hotel Kum-kang-san, at light, 22. VII. 1982, FR(B).

***Altica oleracea* (Linnaeus, 1758)**

Locality. North Pyongan Prov., Mt. Myonhyang-san, netted, 16. VII. 1982, FR(B).

***Aphthona chinensis* Baly, 1877**

Locality. Ryanggang Prov., Samjiyon, 1000m, 26. VI. 1988, OM, GS(B).

***Aphthona merkli* sp. n. (Fig. 5)**

Locus typicus and *derivatio nominis*. Ryanggang Prov., Samjiyon, 1000m, 26. VI. 1988, OM, GS: holotype-male (No. 1345. B), 2 paratypes(B) and 1 paratype(G). The specific name is dedicated to Dr. Otto Merkl from Budapest who collected some of the specimens in North Korea.

Diagnosis. Differs from *A. hammarstroemi* Jacobson and *A. jacobsoni* Ogloblin in having body some more convex, disc of elytron with stronger and not too dense punctures, and ventral median keel of aedeagus much longer and sharp.

Description. Body oval, moderately convex, with very slightly rounded sides, smooth and shining. Black with metallic dark blue lustre (especially on elytron); four-five basal segments of antenna yellow-red, the rest segments black; legs yellow-red, tarsi darkened apically, last femora and underside of body black. Head smooth, impunctate; frontal tubercles oval, raised, large and totally limited by deep grooves; interantennal ridge narrow and highly raised. Antenna filiform, about 3/4 of body length; segment 2d shortest, segment 3d slightly longer, segments 1st and 4th to 11th longest, nearly equal in length. Pronotum about 11/3 as large as long, widest at middle, with regularly rounded sides; surface smooth, with small but distinct, dispersed punctures. Elytrae distinctly broader than pronotum, smooth and shining, with humeral tubercles produced, angulate, and with a small but deep fovea apically; disc deeply, moderately dense and confusely punctured. Hind wings completely developed.

Male. First segment of anterior tarsi weakly broadened. Aedeagus with nearly parallel sides and a broadly rounded apex; underside deeply depressed (especially basal part), with a highly raised and sharp median keel in the apical 2/3 of the aedeagus length; apex in profile slightly curved upwards (Fig. 5).

Length. 2.9-3.0 mm

***Aphthona modesta* Weise**

Locality. Kangwon Prov., Kumgang-san, 21. X. 1987, ZK, LR(B).

***Argopistes tsekooni* Chen, 1934**

Locality. Pyongyang City, Daesong-san, 16. VI. 1988, OM, GS(B)

***Argopus unicolor* Motschulsky, 1860**

Locality. Pyongyang City, Ryongak-san, 17. V. 1985, AV, LZ(B).

***Asiorestia interpunctata* (Motschulsky, 1859)**

Locality. Ryanggang Prov., Taehongdan, 1000m, 29. VI. 1988, OM, GS(B).

***Batophila acutangula* Heikertinger, 1921**

Locality. Ryanggang Prov.: Samjiyon, 1000m, 3. VI. 1985, AV, LZ and 26. VI. 1988, OM, GS, Chong-bong, 900m, 30. VI. 1988, OM, GS and Konchang, 800m, 30. VI. 1988, OM, GS(B).

***Chaetocnema concinnicollis* (Baly, 1874)**

Locality. South Hwanghae Prov., Haeju, Mt. Suyong-san, at light, 31. VII. 1982, FR(B).

***Crepidodera picipes* (Weise, 1887)**

Locality. Kangwon Prov., Kumgang-san, Manmul-san, 21. VI. 1988, OM, GS(B).

***Crepidodera pluta* (Latreille, 1804)**

Locality. Ryanggang City, Mangyongdae, 17. X. 1987, ZK. LR(B).

***Crepidodera nigricoxis* Allard, 1878**

Locality. Ryanggang Prov., Chong-bong, 900m, 30. VI. 1988, OM, GS(B).

***Hemipyxis plagioderoides* (Motschulsky, 1850)**

Locality. Kangwon Prov., Kumgang-san, Onjong-ri, 400m, 21. VI. 1988, OM, GS(B).

***Longitarsus aphthonoides* Weise, 1887**

Locality. Ryanggang Prov., Samjiyon, 1000m, 3. VI. 1985, AV, LZ(B).

****Longitarsus brunneus* (Duftschmidt, 1825)**

Haltica brunnea Duftschmidt, 1825, Fn. Austr., 3: 260.

Locality. Ryanggang Prov., Samjiyon, 1000m, 26. VI. 1988, OM, GS(B).

Distribution. Europe, Balearics, Caucasus, Siberia, Russian Far East. New to the Korean Peninsula.

***Longitarsus dorsopictus* Chen, 1939**

Locality. Pyongyang City: Daesong-san, 16. VI. 1988, OM, GS and Michon-ho, 3. VII. 1988, OM, GS(B).

***Longitarsus godmani* (Baly, 1876)**

Locality. Kaesong City, Kaesong, Hotel Janamsan, at light, 30. VII. 1982, FR(B); Pyongyang City, Mt. Daesong-san, singled, 9 VII. 1982, FR(B).

***Longitarsus lewisii* (Baly, 1874)**

Locality. Kangwon Prov., Kumgang-san, 10/ VII. 1990, MJ(G); Hwanghae Prov., Haeju, Mt. Syong-san, at light, 31. VII. 1982, FR(B).

****Longitarsus nitidus* Jacoby, 1885**

L. nitidus Jacoby, 1885, Proc. Zool. London, p. 727.

Locality. Kangwon Prov., Kumgang-san, 10. VII. 1990, MJ(G).

Distribution. Russian Far East, Japan. New to the Korean Peninsula.

***Longitarsus succineus* (Foudras, 1860)**

Locality. Kangwon Prov., Kumgang-san, 10. VII. 1990, MJ(G); Kumgang-san, Onjong-ri, 400m, 21. VI. 1988, OM, GS(B); North Pyongan Prov., Myonhyang-san, 2. VII. 1990, MJ(G).

***Longitarsus suturellus* (Duftschmidt, 1825)**

Haltica suturella Duftschmidt, 1825, Fn. Austr., 3: 262.

Locality. Ryanggang Prov., Samjiyon, 1000, 26. VI. 1988, OM, GS(B).

Distribution. Europe, Mongolia, Siberia, Russian Far East.

***Luperomorpha preyeri* (Baly, 1874)**

Locality. North Pyongan Prov., Myonhyang-san, 2. VII. 1990, MJ(G).

***Luperomorpha josifovi* sp. n. (Fig. 6)**

Locus typicus and *derivatio nominis*. Kuail, 16. VII. 1990, MJ: holotype-male and paratype-female (G). The specific name is dedicated to Prof. Dr. Michail Josifov from Sofia, who collected the specimens in North Korea.

Diagnosis. Differs from *L. trivialis* Weise and *L. funesta* Baly in having apical 1/6 portion of aedeagus narrowed.

Description. Pitchy black, finely shagreened; 2d and 3d antennal segments and legs blackish-brown, hind femora black. Head with frontal tubercles distinctly delimited from behind, and with interantennal ridge sharply raised. Antenna with segment 4th equal to segments 2d and 3d combined. Pronotum 1 1/4 times as broad as long widest at middle, with sides regularly rounded and with anterior angles small but sharply prominent; disc with very small, dispersed punctures, Elytron weakly rounded laterally, much broader than pronotum, with humeral tubercles raised; puncturation of disc fine, dense and uniform, much stronger than that of pronotum.

Male. First segment of anterior tarsi heart-shaped, strongly dilated, slightly broader than segment 3d. Aedeagus (Fig. 6) parallelsided, narrowed apically; underside not deeply but distinctly longitudinally depressed; apical part curved downwards.

Length. 2.85-3.25 mm

***Nonarthra cyaneum* Baly, 1874**

Locality. North Pyongan Prov., Myonhyang-san, 21. V. 1985, AV, LZ(B) and 16. VII. 1982, FR(B).

***Ochrosis sibirica* Pic, 1909**

Locality. North Pyongan Prov., Mt. Moynhyang-san, netted, 16. VII. 1982, FR(B).

***Phyllotreta koltzei* Weise, 1887**

Locality. North Pyongan Prov., Myonhyang-san, 22. V. 1985, AV, LZ(B).

***Phyllotreta striolata* (Fabricius, 1803)**

Locality. Pyongyang City, Daesong-san, 15. V. 1985, AV, LZ(B), 16. V. 1985, OM, GS(B), 9. VII. 1982, FR(B); Ryanggang Prov.: Samjiyon, 1000m, 4. VI. 1988, AV, LZ(B), 26. VI. 1988, OM, GS(B), Taehongdan, 1000m, 29. VI. 1988, OM, GS(B) and Paekdu-san - milyong, 1500m, 24. VI. 1988, OM, GS(B); South Pyongan Prov., Lokam reserve, 12. V. 1985, AV, LZ(B); Kaesong City, Kaesong, Hotel Janamsan, at light, 30. VII. 1982, FR(B); North Pyongan Prov., Mt. Myonhyang-san, Hotel Myonhyang-san, at light, 13. VII. 1982, FR(B).

***Psylliodes attenuata* (Koch, 1803)**

Locality. Pyongyang City, Ryongak-san, 15. VI. 1988, OM, GS(B).

***Psylliodes cucullata gansuica* Jacobson, 1922**

Locality. Kangwon Prov., Kumgang-san, 10. VII. 1990, MJ(G).

***Psylliodes takizawai* Gruev, 1990**

Locality. Kangwon Prov., Kumgang-san, 10. VII. 1990, MJ(G).

***Sphaeroderma apicale* Baly, 1874**

Locality. North Pyongan Prov., Myonhyang-san, 21. V. 1985, AV, LZ(B).

***Sphaeroderma leei* Takizawa, 1980**

Locality. North Pyongan Prov., Mt. Myonhyang-san, netted, 16. VII. 1982, FR(B). Aedeagus examined.

Subfamily Hispinae***Dactylispa angulosa* (Solsky, 1871)**

Locality. North Pyongan Prov.: Mt. Myonhyang-san, 22. V. 1985, AV, LZ(B) and Mt. Myonhyang-san, Manpoktong, 14. VII. 1982, netted, FR(B); Kaesong City, Kaesong, Hotel Janamsan, singled, 30. VII. 1982, FR(B).

***Hispellinus chinensis* Gressitt, 1950**

Locality. Pyongyang City, Daesong-san, 16. VI. 1988, OM, GS(B).

Subfamily Cassidinae***Cassida fusciorufa* Motschulsky, 1866**

Locality. Pyongyang City, Ryongak-san, 31. V. 1985, AV, LZ(B).

***Cassida mandli* Spaeth, 1921**

Locality. Kanwon Prov., Kumgang-san, Onjong-ri, 400m, 21. VII. 1988, OM, GS(B).

***Cassida nebulosa* Linnaeus, 1758**

Locality. Ryanggang Prov., Samjiyon, 1000m, 26. VI. 1988, OM, GS(B); North Pyongan Prov., Mt. Myonhyang-san, Manpoktong, netted, 16. VII. 1982, FR(B).

***Cassida pallidicollis* Boheman, 1856**

Locality. Kaesong City, Kaesong, Hotel Janamsan, 29. VII. 1982, FR(B).

***Cassida piperta* Hope, 1842**

Locality. North Pyongan Prov., Mt. Myonhyang-san, Manpoktong, netted, 16. VII. 1982, FR(B).

***Thlaspidia lewisii* (Baly, 1874)**

Locality. North Pyongan Prov., Mt. Myonhyang-san, 22. V. 1985, AV, LZ(B) and 2. VII. 1990, MJ(G).

韓半島産 잎벌레類의 新分布 및 4新種 記載

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북한지역에서 채집된 잎벌레類를 중심으로 분류동정한 결과로 68種에 대한 分布지역을 추가 기록하였으며, 이 중에서 *Chrysomela cuprea* Fabricius, *Chrysomela lapponica* Linnaeus, *Phratora polaris* (Schneider), *Longitarsus brunneus* (Duftschmidt), *Longitarsus nitidus* Jacoby등 5種이 한반도산 미기록종으로 밝혀졌다. 또한 *Chrysomela cyaneoviridis* sp. n., *Phratora ryanggangensis* sp. n., *Aphthona merkli* sp. n., *Luperomorpha josifovi* sp. n.등 4種은 新種으로 記載된다.

검색어: 분류, 딱정벌레目, 잎벌레科, 신종, 한국

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